SECTION 1.0

Introduction, Purpose and Need, Objectives, and Background

SECTION 1.0

Introduction, Purpose and Need, Objectives, and Background

1.1 Introduction

This Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) addresses the environmental impacts that could result from implementing the proposed Imperial Irrigation District (IID) Water Conservation and Transfer Project and Habitat Conservation Plan (HCP) (collectively referred to as the Proposed Project or Project). The Final EIR/EIS was prepared in accordance with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to inform the public and meet the needs of local, state, and federal permitting agencies.

The United States (U.S.) Department of the Interior Bureau of Reclamation (Reclamation) is the federal Lead Agency under NEPA, and IID is the state Lead Agency under CEQA. The Lead Agencies have directed and supervised the preparation of this Final EIR/EIS and have independently evaluated its information and findings. The United States Fish and Wildlife Service (USFWS) is the federal agency authorized to issue Incidental Take Permits for the Proposed Project pursuant to Section 10 of the federal Endangered Species Act (ESA). USFWS is a Cooperating Agency under NEPA. Cooperating, Responsible, and Trustee Agencies are listed in Section 1.8.1.

The Final EIR/EIS Impact Statement (EIR/EIS) consists of the following six volumes:

- Volume 1 (Preface—Section 3.2)
- Volume 2 (Section 3.3—Section 9.23)
- Volume 3 (Section 10.0—Section 10.5)
- Volume 4 (Section 10.6—Section 14)
- Volume 5 (Appendix A—Appendix C)
- Volume 6 (Appendix D—Appendix O)

See the Table of Contents in Volume 1 (the present Volume) for a detailed listing of the sections contained within each Volume.

In addition, the following related environmental documents are incorporated into this EIR/EIS by reference:

- Final Environmental Impact Statement Volume I and Appendix I of the *Implementation Agreement, Inadvertent Overrun and Payback Policy, and Related Federal Actions* (IA EIS), dated October 2002, prepared by U.S. Department of the Interior Bureau of Reclamation.
- Final Program EIR for *Implementation of the Colorado River Quantification Settlement Agreement* (QSA PEIR), State Clearinghouse Number 200061034, dated June 2002, prepared by Coachella Valley Water District, Imperial Irrigation District, The Metropolitan Water District of Southern California, and San Diego County Water Authority.

- Biological Opinion for Interim Surplus Criteria, Secretarial Implementation Agreements, and Conservation Measures on the Lower Colorado River, Lake Mead to the Southerly International Border of Arizona, California and Nevada, dated January 12, 2001, prepared by USFWS.

The Proposed Project involves the conservation by IID of up to 300 thousand acre-feet per year (KAFY) of Colorado River water and the transfer of this conserved water from IID to the San Diego County Water Authority (SDCWA), Coachella Valley Water District (CVWD), and/or Metropolitan Water District of Southern California (MWD). The terms of the water conservation and transfer transaction between IID and SDCWA are set forth in the Agreement for Transfer of Conserved Water (IID/SDCWA Transfer Agreement) executed by IID and SDCWA in 1998, as amended (see Sections 1.4.5 and 2.2.4.1). The IID/SDCWA Transfer Agreement provides for the conservation and transfer of up to 300 KAFY from IID to SDCWA. A Summary of the IID/SDCWA Transfer Agreement is contained in Appendix A.

Subsequent to execution of the IID/SDCWA Transfer Agreement, the proposed Quantification Settlement Agreement (QSA) was negotiated among IID, CVWD, and MWD (see Sections 1.4.7 and 2.2.4.2). Although not a potential signatory to the QSA, SDCWA is a member agency of MWD and participated in the negotiations. The QSA provides for a number of related agreements which would implement components of the settlement transaction. For ease of reference in this EIR/EIS, a reference to the QSA is intended to include the related agreements provided for therein. A summary of the proposed QSA and the related agreements provided for therein is contained in Appendix A. The IID/SDCWA Transfer Agreement and the QSA are available for review at IID Headquarters, 333 East Barioni Blvd., Imperial CA, 92251.

A number of conditions precedent must be satisfied before the QSA is finally approved and implemented by the participating agencies. If the QSA is approved and implemented, the transfer of conserved water from IID to SDCWA pursuant to the IID/SDCWA Transfer Agreement would be limited to 200 KAFY, and up to 100 KAFY would be transferred to CVWD and/or MWD pursuant to the QSA.

The Proposed Project thus includes two possible implementation scenarios:

- **IID/SDCWA Transfer Agreement Only:** If the QSA is not approved and implemented, up to 300 KAFY of conserved water would be transferred from IID to SDCWA pursuant to the IID/SDCWA Transfer Agreement.
- **QSA Implementation:** If the QSA is approved and implemented, up to 200 KAFY would be transferred from IID to SDCWA pursuant to the IID/SDCWA Transfer Agreement and an additional amount of up to 100 KAFY of conserved water would be transferred to CVWD and/or MWD.

The Proposed Project also includes implementation of a Habitat Conservation Plan (HCP) (see Appendix C) to address impacts to species and habitats within the IID water service area, the right-of-way of the All American Canal (AAC), and the Salton Sea.

This section describes the Project's purpose, need, and objectives. Following this description, the background and history of the Proposed Project are presented. Finally, this section


Table of Contents


Continue

provides an overview of other environmental compliance documents that are related to the Proposed Project, and a description of how local, state, and federal permitting agencies will use this document. A detailed description of the Proposed Project and Alternatives to the Proposed Project is included in Section 2.

1.1.1 Environmental Review Process

On January 17, 2002, IID filed a Notice of Completion with the Governor's Office of Planning and Research, State Clearinghouse, indicating that the Draft EIR/EIS had been completed and was available for review. On January 25, 2002 Reclamation filed a Notice of Availability (NOA) with the Federal Register, also indicating that the Draft EIR/EIS was complete and available for review. IID and Reclamation made the Draft EIR/EIS available for public review and comment for 90 days, from January 25, 2002 to April 26, 2002. The Draft EIR/EIS was distributed to Responsible and Trustee Agencies pursuant to CEQA and to Cooperating Agencies pursuant to NEPA, and was made available to members of the public at public libraries and on the Internet.

On April 2, 3, and 4, 2002, IID and Reclamation held public hearings in La Quinta, El Centro, and San Diego, California, respectively, to receive oral comments on the Draft EIR/EIS. Written comment letters were accepted by both Lead Agencies, IID and Reclamation, until the close of the review period on April 26, 2002. In June, 2002, a Final EIR/EIS (June 2002 Final EIR/EIS) was prepared for consideration by the IID Board of Directors (IID Board). The June 2002 Final EIR/EIS incorporated the Draft EIR/EIS modifications and additions thereto set forth in an Errata section, copies of all written and oral comments received on the Draft EIR/EIS, and responses to those comments. This Final EIR/EIS contains copies of all written and oral comments received on the Draft EIR/EIS and responses to those comments in Sections 7-10.

On June 28, 2002, the IID Board certified the June 2002 Final EIR/EIS as adequate pursuant to the requirements of Section 15090 of the CEQA Guidelines.

To comply with the requirements of NEPA, specifically the Council on Environmental Quality's regulations implementing NEPA related to the use of errata (40 CFR Part 1503.4(c)), this Final EIR/EIS has been prepared. It differs from the June 2002 Final EIR/EIS in the following limited respects:

- Errata (text revisions to the Draft EIR/EIS) contained in Section 4 of the June 2002 Final EIR/EIS have been incorporated into the text of this document and the Errata section has therefore been eliminated.
- This document does not include any analysis of Habitat Conservation Plan Approach 1: Hatchery and Habitat Replacement, which was evaluated in the Draft EIR/EIS and subsequently eliminated from the HCP (see Section 2.2.6.7 and Master Response 9.5 on Approach to Salton Sea Habitat Conservation Strategy in this Final EIR/EIS, or Master Response 3.5 in the June 2002 Final EIR/EIS).
- Elevation and surface area values, as projected by the Salton Sea Accounting Model, have been provided for Alternatives 2 and 3 - with implementation of the Salton Sea Habitat Conservation Strategy. The June 2002 Final EIR/EIS did not have these values for Alternatives 2 and 3.

Reclamation will file this version of the Final EIR/EIS with the U.S. Environmental Protection Agency (EPA). However, the Record of Decision (ROD) by Reclamation is not expected to be completed until after Project approval by the IID Board. Currently, the ROD is expected to be completed in December 2002, to meet the deadlines imposed by the Interim Surplus Guidelines. As noted above, this document has been developed to fulfill the requirements of both CEQA and NEPA. From the federal perspective, the Council on Environmental Quality regulations authorize federal agencies undertaking a NEPA analysis of an action which also has state and local components, to work with the state and local agencies so that duplication of environmental documents is avoided as much as possible (40 CFR Part 1606.2). As a result of this joint undertaking, there may be statements, data and analyses that are included in this EIR/EIS for the purposes of complying with CEQA that have no bearing on requirements under NEPA, or vice versa. Consequently, there may be information presented in this document which does not reflect the position of the United States and is merely included for purposes of CEQA analysis. The ROD executed in this matter by the Secretary will identify the documentation supporting the federal action.

As noted above, for CEQA purposes the June 2002 Final EIR/EIS was certified by the IID Board and has been utilized by the California State Water Resources Control Board (SWRCB) to support its action on the joint petition filed by IID and SDCWA for approval of the water transfer. It is anticipated that upon its issuance, the IID Board will review this integrated version of the Final EIR/EIS and determine it is substantially in conformance with the June 2002 Final EIR/EIS. At a later date, the IID Board will consider whether or not to approve the Proposed Project or an Alternative. Prior to such approval, the IID Board will: (1) adopt appropriate findings regarding the significant environmental effects identified in the Final EIR/EIS, the availability of feasible alternatives and mitigation measures to reduce or avoid significant environmental effects, and other matters pursuant to Public Resources Code Sections 21002, 21002.1, 21081, and 21081.5 and CEQA Guidelines Sections 15002, 15021, 15064, and 15091; (2) if necessary, adopt a statement of overriding considerations pursuant to Public Resources Sections 21002 and 21081 and CEQA Guidelines Section 15093; and (3) adopt a mitigation, monitoring, and reporting program pursuant to Public Resources Section 21081.6 and CEQA Guidelines Sections 15091 and 15097. After the IID Board approves the Project, and adopts the appropriate Findings and Statement of Overriding Considerations and required Mitigation Monitoring and Reporting Program, it will file a Notice of Determination (NOD) with the State Clearinghouse pursuant to CEQA Guidelines Section 15094. Project approval is not expected to be considered by the IID Board until the 4th quarter of 2002 after completion of the SWRCB approval process for the water transfers (see Section 1.7.2.1 of the EIR/EIS) and issuance of Incidental Take Permits pursuant to the state and federal Endangered Species Acts (ESAs) (see Sections 1.7.1.2 and 1.7.2.2 of the Final EIR/EIS).

1.2 Project Purpose, Need, and Objectives

This section presents the purpose, need, and objectives of the Project. The purpose and need are described in accordance with NEPA, and the objectives are described in accordance with CEQA.

Under NEPA, an EIS "shall briefly specify the underlying purpose and need to which the agency is responding" with the proposed action (40 CFR § 1502.13). Reclamation's NEPA Handbook (1990) states that the purpose and need "should briefly describe why the action is needed and what the action is designed to accomplish." Taken together, the purpose and need for a project establish the basic parameters for identifying the range of alternatives to be considered in an EIS prepared in accordance with NEPA. For Reclamation, the underlying purpose and need for the Proposed Project is to facilitate implementation of the IID/SDCWA Transfer Agreement and the QSA. For USFWS, the underlying purpose and need for the HCP is to minimize and mitigate the effects of the Proposed Project on covered species. Under CEQA, an EIR must include a "statement of objectives sought by the Proposed Project" (14 CCR § 15124[b]). These objectives are used to establish the range of alternatives to be considered in the Draft EIR/EIS for the purposes of CEQA (14 CCR § 15126[d]). For IID, the underlying objective of the Proposed Project is to meet the terms of and implement the IID/SDCWA Transfer Agreement, the QSA, and the HCP. The specific objectives for IID, and the purpose and need for Reclamation, are further described below.

1.2.1 Water Conservation and Transfer Objectives

The water conservation and transfer component of the Proposed Project is defined by the negotiated contractual provisions of two separate agreements: the IID/SDCWA Transfer Agreement and the proposed QSA. These agreements are intended to advance certain individual objectives of the parties to the agreements as well as certain common objectives. The purpose of this component of the Project is to meet the proponents' objectives and expectations for each agreement.

IID has determined that water conservation and transfer projects would provide a means for conserving water, benefiting IID and the recipient water agencies and their service areas in southern California. Water conservation and transfer projects accomplish two objectives: they respond to the State Water Resources Control Board (SWRCB) directive (see Section 1.4.4) that IID develop and implement a conservation program, and they protect IID's water rights. Under California laws designed to encourage water conservation and voluntary transfers, title to conserved water remains with the transferring entity. (See Section 2.2.4.3 for a more detailed description of California water law as applied to the Project.) On this basis, IID can allow conserved water to be used by another entity while retaining its historic water rights, which have been, and continue to be, the basis for economic activity in the Imperial Valley. Proceeds from a water transfer transaction could be used to fund the costs of implementing conservation measures, particularly the cost of on-farm conservation measures, as well as environmental mitigation costs and other implementation costs. In addition, IID anticipates that proceeds from the sale of conserved water would provide economic benefits to IID, the community, and cooperating landowners and tenants in the Imperial Valley.

The IID/SDCWA Transfer Agreement fulfills the following objectives for IID:

- To conserve water and transfer it in a market-based transaction that provides payments to IID to fund a water conservation program, including the cost of on-farm and system improvements, environmental mitigation costs, and other implementation costs.

- To develop a water conservation program that includes the voluntary participation of Imperial Valley landowners and tenants so that on-farm conservation measures, as well as water delivery system conservation measures, can be implemented.
- To implement a water conservation and transfer program without impairing IID's historic senior-priority water rights, in a manner consistent with state and federal law.
- To provide an economic stimulus to Imperial Valley's agricultural economy and the surrounding community.

The IID / SDCWA Transfer Agreement fulfills the following objectives for SDCWA:

- To acquire an independent, alternate, long-term water supply that provides drought protection and increased reliability for municipal, domestic, and agricultural uses.
- To diversify its sources of water supply and reduce its current dependence on a single source for imported water, in order to enhance the reliability of its water supply.
- To establish a stabilized, competitive price for a significant portion of its water supply.

Both the IID / SDCWA Transfer Agreement and the QSA incorporate crucial elements of California's draft Colorado River Water Use Plan (California Plan) (see Section 1.4.6), which provides a framework to assist California in reducing its use of Colorado River water to its apportionment of 4.4 million acre-feet (MAF) in a normal year, and to mitigate the impact on California water agencies and water users associated with the reduction in diversions from the Colorado River. The broad purpose of the QSA, in particular, is to facilitate key elements of the California Plan. The parties to the QSA, which are IID, CVWD, and MWD, have determined that the QSA fulfills the following collective objectives of its proponents:

- To settle, by consensual agreement, long-standing disputes regarding the quantity, priority, use, and transferability of Colorado River water.
- To agree on a plan for the future distribution of Colorado River water among IID, CVWD, and MWD for up to 75 years, based on Colorado River water budgets for IID, CVWD, and MWD.
- To facilitate agreements and actions which, when implemented, would enhance the certainty and reliability of Colorado River water supplies available to IID, CVWD, and MWD, and would assist these agencies in meeting their water demands within California's apportionment of Colorado River water.
- To identify agreed-on terms and conditions for the conservation and transfer of specific amounts of Colorado River water within California.
- To provide incentives to promote conservation of Colorado River water.

1.2.2 Habitat Conservation Plan Objectives

For IID, the objectives of the HCP are:

- To minimize and mitigate the impacts of any take of covered species that might occur as a result of the implementation of the IID / SDCWA Transfer Agreement, the IID water conservation and transfer projects provided for under the QSA, the consensual cap on

Colorado River water diversions by IID, and continuation of IID's routine operation and maintenance (O&M) activities in connection with IID's water irrigation and drainage system.

- To provide regulatory assurances to IID that additional mitigation measures to address impacts on covered species would not be required beyond the measures described in the HCP.
- To support issuance of Incidental Take Permits under both the federal and the state Endangered Species Acts (ESA) for the covered activities.

The components of the HCP are further described in Section 2.2.6 and in Appendix C.

1.2.3 Reclamation's Purpose and Need

The Secretary of the U.S. Department of Interior (Secretary) proposes to take the federal action necessary to allow the implementation of the Proposed Project. Therefore, Reclamation's underlying purpose and need for the Proposed Project are to facilitate implementation of the IID / SDCWA Transfer Agreement and the QSA. The Secretary's proposed draft Implementation Agreement (IA) represents the federal commitment to implement water deliveries to allow implementation of the QSA; the Proposed Project is a component of the IA, assuming full implementation of the QSA. A comparable implementation agreement would be required to represent the federal commitment to implement water deliveries to allow implementation of the IID / SDCWA Transfer Agreement, if the QSA is not fully implemented. The need for the federal action is to assist California in reducing its use of Colorado River water to its 4.4 MAFY apportionment in a normal year. This reduction in California's use of Colorado River water would benefit the entire Colorado River Basin.

1.2.4 USFWS' Purpose and Need

The ESA is intended to identify species needing protection, means to determine the type of protective measures needed, and enforcement measures. The U.S. Secretaries of the Interior (through USFWS) and Commerce (National Marine Fisheries Service, NMFS) are responsible for implementing the ESA.

The ESA provides for a process by which species are reviewed to determine whether they are to be listed and receive protection under the ESA. If a species is listed, this does not mean that individuals or habitat of that species cannot be affected. Sections 7 and 10 of the ESA provide provisions to "take" threatened or endangered species if consultation has concluded with a take authorization. Section 10(a)(1)(B) of the ESA allows USFWS to issue an Incidental Take Permit authorizing take that is incidental to an otherwise lawful activity if the applicant provides a conservation plan meeting the following factors identified in Section 10(a)(2)(B):

- The taking will be incidental.
- The applicant will, to the maximum extent practicable, minimize and mitigate the impacts of such taking.
- The applicant will ensure that adequate funding for the plan will be provided.

- The taking will not appreciably reduce the likelihood of the survival and recovery of the species in the wild.
- The measures, if any, required under subparagraph (A)(iv) (i.e., any additional measures that USFWS may require as being necessary or appropriate for purposes of the plan) will be met, and USFWS has received any other assurances it requires that the plan will be implemented.

USFWS will determine whether the HCP meets the requirements of ESA and is sufficient to support issuance of Incidental Take Permits. The purpose and need for the HCP is:

- To minimize and mitigate the effects of implementing the covered activities described in the HCP on the covered species identified in the HCP.
- To satisfy the requirements for issuance of Incidental Take Permits pursuant to Section 10(a) of ESA by specifying measures to minimize the effects of the covered activities as well as measures that ensure habitat availability for covered species.

1.3 Project Location and Region of Influence

The Project's region of influence comprises the areas that would be affected by the Project's water conservation and transfer components, which are described in Section 2, Description of the Proposed Project and Alternatives. Based on the locations of the Project components, six geographic subregions comprise the Project's region of influence:

- **LCR:** This subregion is defined as the lower Colorado River (LCR) and its historic 100-year floodplain, from Lake Havasu full pool elevation at Parker Dam to Imperial Dam.
- **IID Water Service Area and AAC:** This subregion is defined as the IID water service area and the AAC right-of-way, which extends from the Imperial Valley east to Imperial Dam.
- **Salton Sea:** This subregion is defined as the Salton Sea and its existing shoreline at the time that the NOP for the Draft EIR/EIS was published, in addition to a 0.5 mile setback around the Sea.
- **SDCWA Service Area:** This subregion is defined as the SDCWA service area.
- **MWD Service Area:** This subregion is defined as the MWD service area.
- **CVWD Service Area:** This subregion is defined as the CVWD service area. However, the Proposed Project affects only the portion of the CVWD service area that is entitled to receive Colorado River water, identified as Improvement District No. 1.

The six geographic subregions are depicted in Figure 1-1 and described below. For the purposes of the environmental setting descriptions and impact analyses (see Section 3) in this EIR/EIS, the region of influence within these subregions could vary depending on the environmental resource being considered. If the geographic subregions for a particular environmental resource area differ from those shown in Figure 1-1, the modified subregions and the rationale for the modification are described in the environmental setting section for the specific environmental resource area.

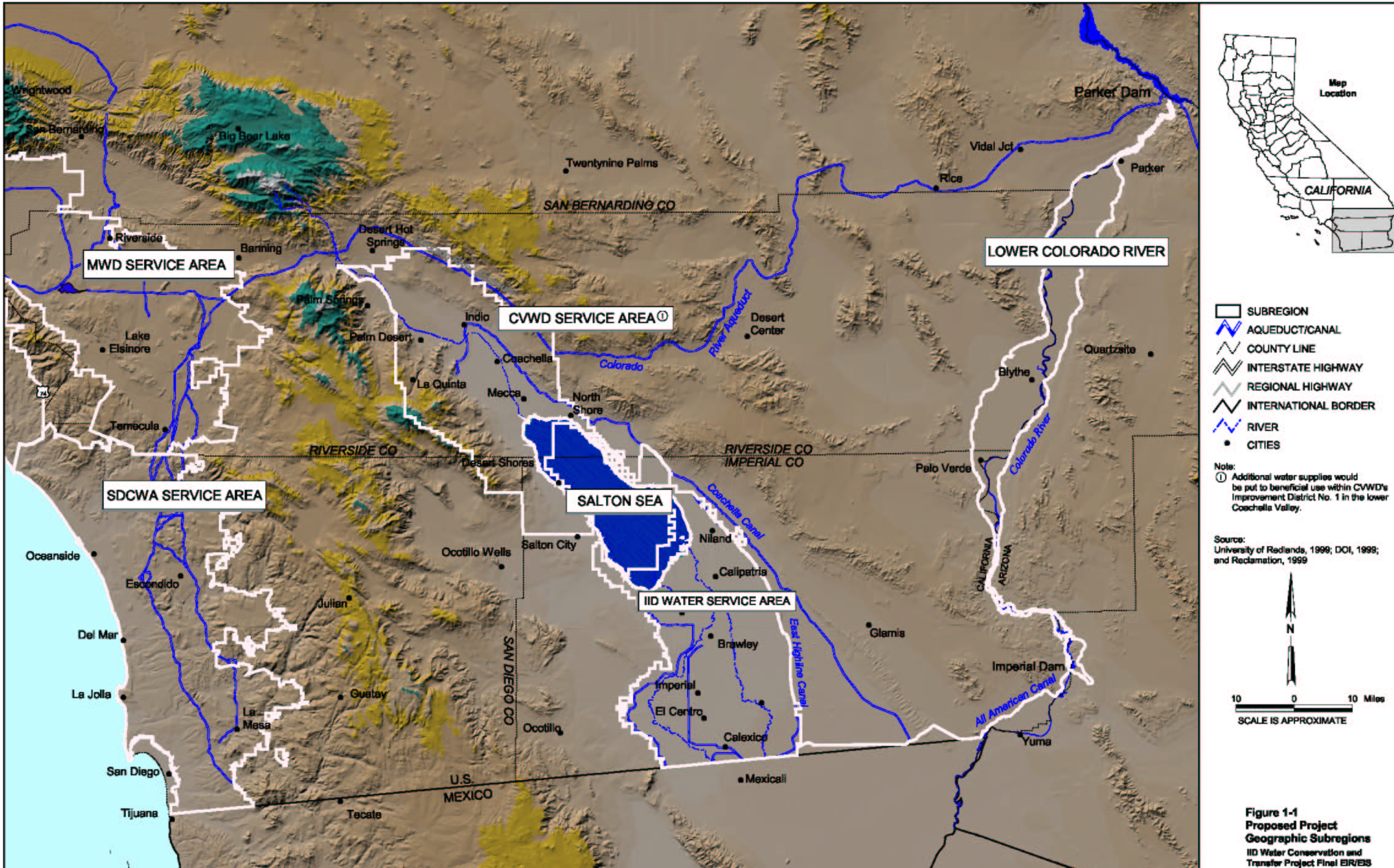


Figure 1-1
Proposed Project Geographic Subregions
IID Water Conservation and Transfer Project Final EIR/EIS

CH2M Hill RDD ArcView Project File \\rddgis\iid\regional_maps_tbh.apr iid_fig1-1.pdf 1:50 p.m. 10-7-2002

CH2MHILL

Table of Contents Continue

1.3.1 LCR

As stated above, this subregion is defined as the LCR and its historic 100-year floodplain, including the full pool elevations from Lake Havasu at Parker Dam to Imperial Dam. Section 1.4.2 provides an overview of the allocation of Colorado River water among water rights holders in California and the key LCR diversion facilities. Figure 1-2 shows the key distribution facilities along the LCR. Further information on the federal and state laws, regulations, policies, and other decisions that govern the allocation of Colorado River water is presented in Section 3.1, Hydrology and Water Quality.

1.3.2 IID Water Service Area and All American Canal

IID is an irrigation district, a limited-purpose public agency, formed under the laws of the State of California. IID holds rights to take water from the Colorado River and deliver it to farmers, tenants, and landowners in Imperial County. IID provides agricultural water to approximately 500,000 acres of some of the most intensively farmed land in the nation. Irrigated agriculture is the primary economic enterprise within IID's water service area, the extent of which is shown in Figure 1-3. Landowners and tenants within IID's water service area conduct on-farm operations, which include crop irrigation (i.e., applying water to fields) and maintaining on-farm drainage systems. IID does not have authority to approve or disapprove land use, water use, or crop selection by farmers.

IID's operational activities are associated with irrigation (i.e., the diversion, measurement, conveyance, and delivery of Colorado River water to customers within the IID water service area through its canal system) and drainage [i.e., the collection, removal, measurement, and transport of drainage waters to the Salton Sea (see Figure 1-4) through its drain system]. The major features of this irrigation and drainage system are illustrated in Figure 1-5. Figure 1-6 shows the canals and drains in the IID water service area, and Figure 1-7 shows the flow of water through the IID irrigation and drainage system.

1.3.2.1 Irrigation

To deliver water to its service area, IID diverts water from the Colorado River at Imperial Dam. This water is desilted and conveyed by gravity through the 82-mile AAC to three primary main canals. These primary main canals (East Highline, Central Main, and Westside Main) branch off the AAC as it moves across the southern portion of the Imperial Valley. The main canals supply water to numerous lateral canals throughout the irrigated service area of IID. The lateral canals carry water from the main canals to farm fields; turnouts are used on the canals and laterals to deliver water to individual farm fields. All canals and laterals are owned and operated by IID.

In total, IID operates and maintains a delivery system consisting of approximately 1,667 miles of canals, including approximately 1,114 miles of concrete-lined canals, approximately 537 miles of unlined earthen canals, and approximately 16 miles of pipe (IID 2000). To improve system efficiencies, IID uses seven independent regulating reservoirs to level out the variability in water supply and demand. The supply of water must be ordered from Lake Havasu one week in advance; the quantity is based on the estimated demand. Actual demand is affected by weather conditions.

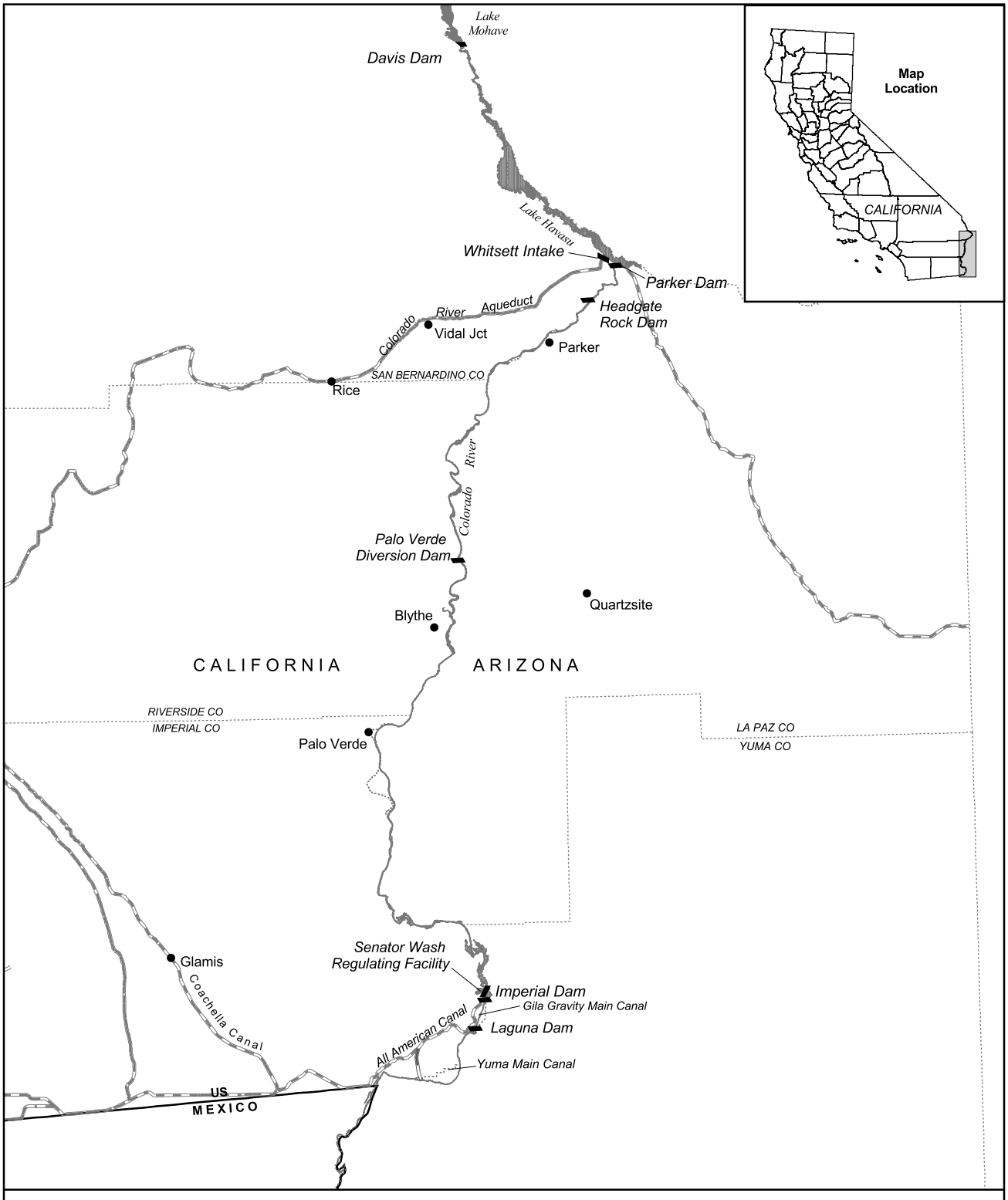
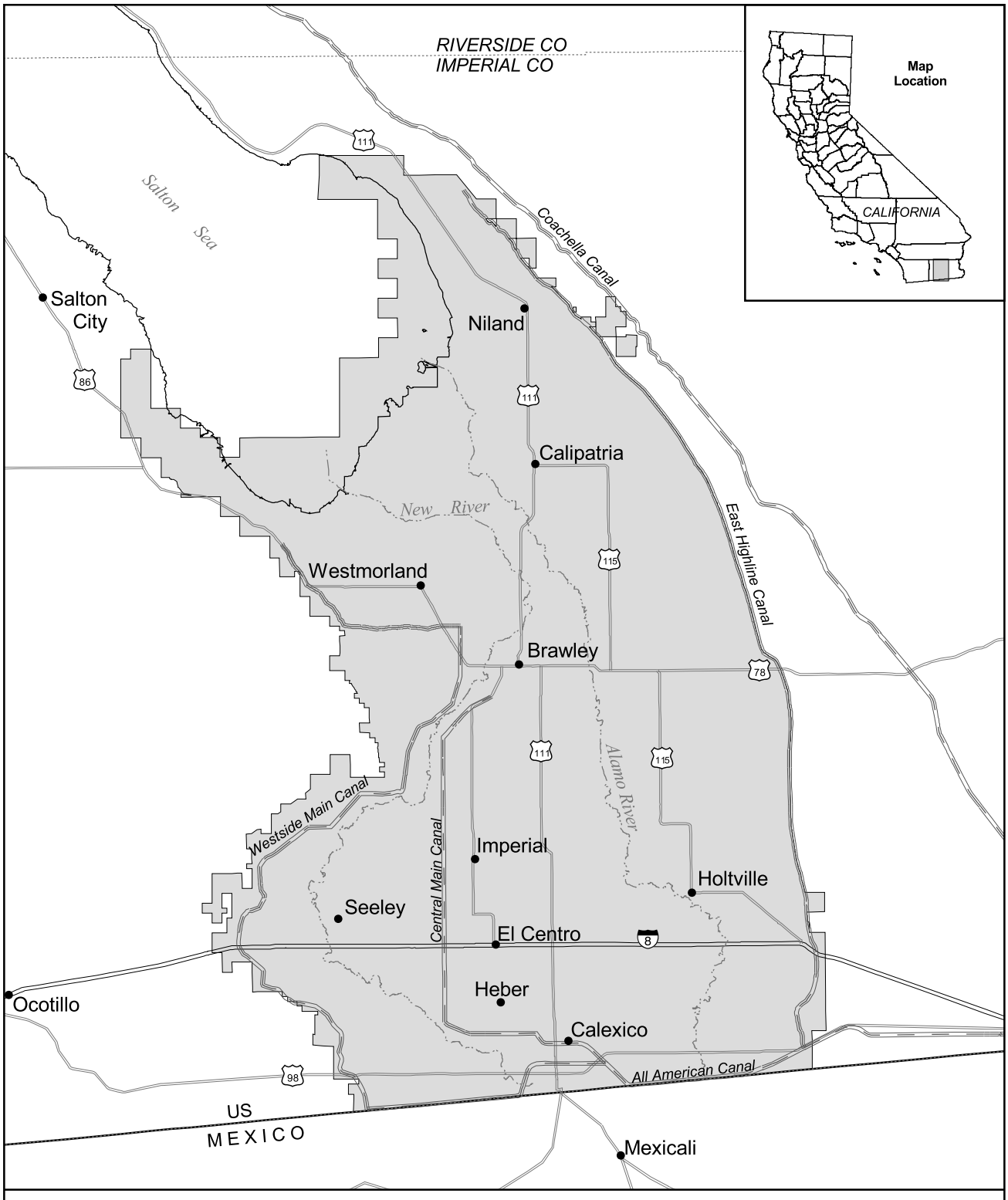


Figure 1-2
Water Distribution Facilities Along the Lower Colorado River
IID Water Conservation and Transfer Project Final EIR/EIS



Source:
University of Redlands 1999; DOI 1999; and Reclamation 1999

Figure 1-3
IID Water Service Area
IID Water Conservation and Transfer Project Final EIR/EIS

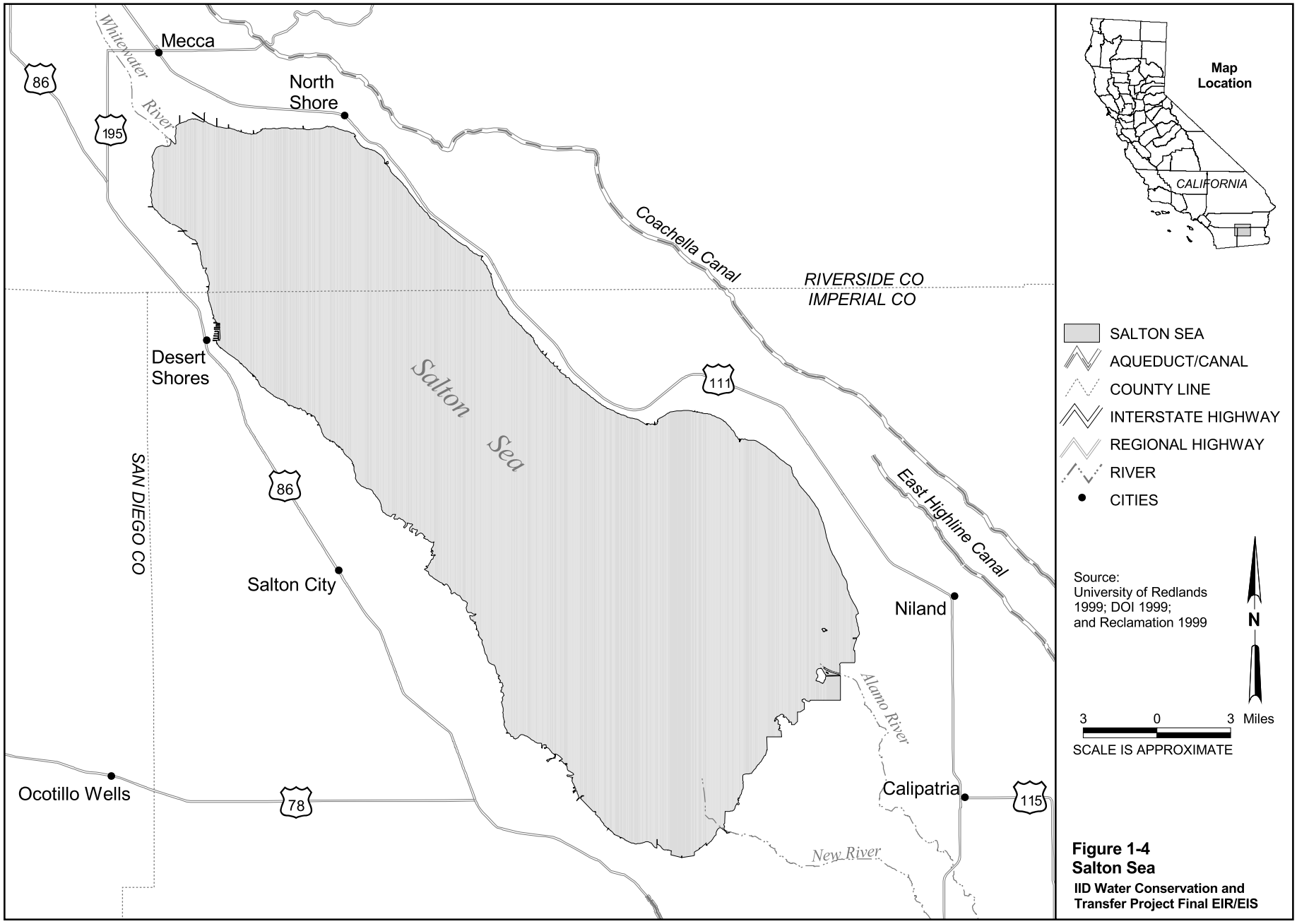


Figure 1-4
Salton Sea
IID Water Conservation and Transfer Project Final EIR/EIS

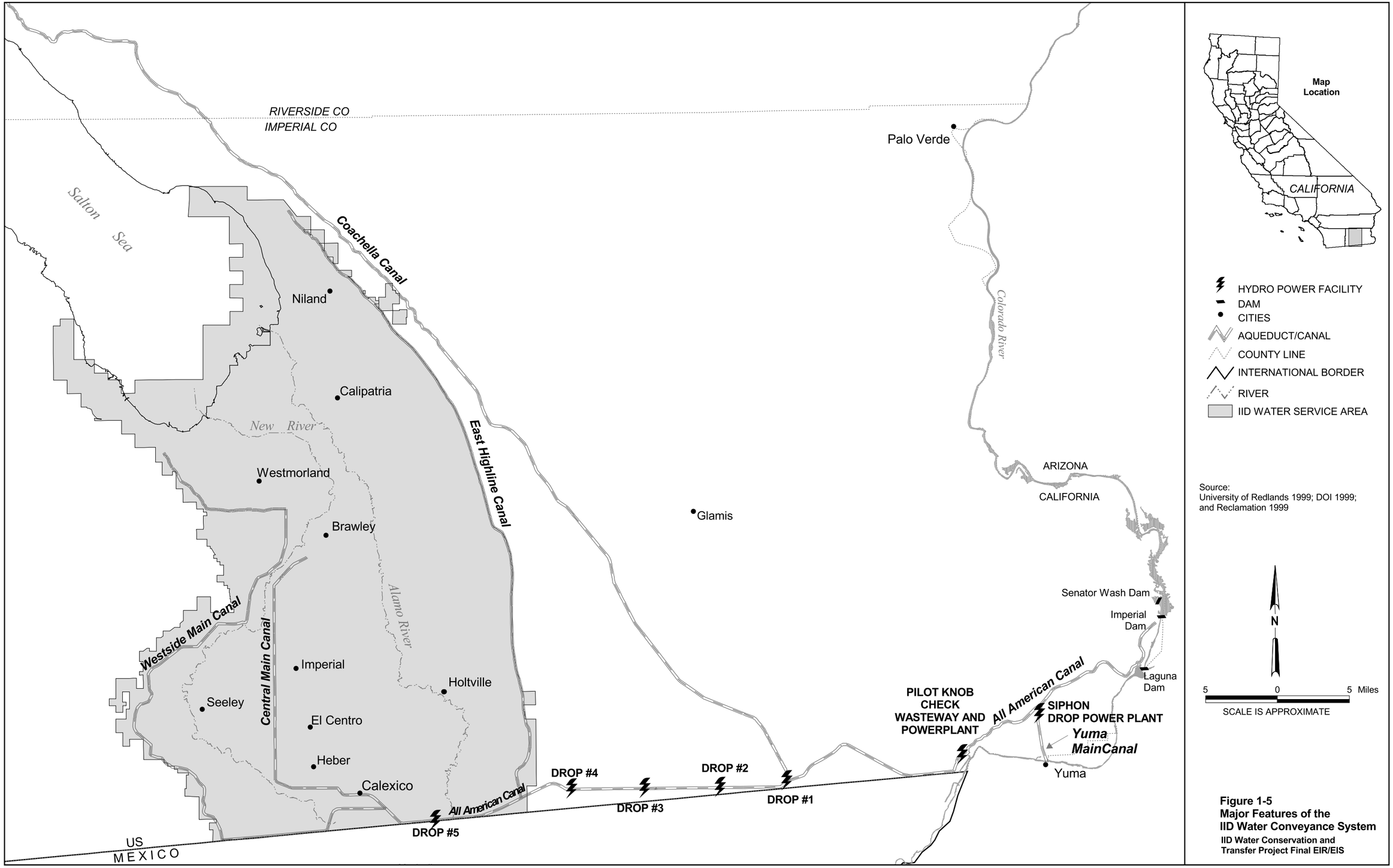


Figure 1-5
Major Features of the IID Water Conveyance System
IID Water Conservation and Transfer Project Final EIR/EIS